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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,848	12/19/2001	Mohammed N. Islam	20434-758	8994

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EXAMINER

MONBLEAU, DAVIENNE N

ART UNIT PAPER NUMBER

2828

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/033,848

Applicant(s)

ISLAM, MOHAMMED N.

Examiner

Davienne Monbleau

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 95-104 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 95-104 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

  
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**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 19 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12-19/01 6) ☐ Other:

## DETAILED ACTION

### *Claim Objections*

Claim 96 is objected to because of the following informalities: the preamble of a dependent claim should match that of the independent claim from which it depends.

Appropriate correction is required.

### *Specification*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 95-98 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,356,384. Although the conflicting claims are not identical, they are not patentably distinct from each other because the

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specifics of the Raman amplifier may be modified for desired results. Regarding Claim 95, '384 teaches in Claim 1 dividing an optical signal into first and second beams, directing said first beam to a Raman amplifier, directing said second beam to a rare-earth doped amplifier, and combining said first and second beams to produce an amplified output signal.

Regarding Claim 96, erbium-doped fiber amplifiers are well known in the art and commonly used for amplification purposes.

Regarding Claim 97, it is inherent that said Raman amplifier and said rare-earth amplifier amplify and spectrally broadens said first and second beams, respectively.

Regarding Claim 98, '384 teaches in Figure 1 that said optical signal has a wavelength between 1430 nm and 1620 nm, which is base on the material used and the pumping energy.

Claims 95-104 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 91 of U.S. Patent No. 6,052,393. Although the conflicting claims are not identical, they are not patentably distinct from each other because, for Claims 95-98, the method claimed in the application is inherent to the device claimed in the patent and requires the same structural assembly, and for Claims 99-104, the claims in the application have the same structural elements as the patent, but are broader in scope.

Regarding Claim 95, '393 teaches in Claim 91 dividing an optical signal into first and second beams, directing said first beam to a Raman amplifier, directing said second beam to a rare-earth doped amplifier, and combining said first and second beams to produce an amplified output signal.

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Regarding Claim 96, '393 teaches in Claim 91 that said rare-earth doped amplifier is an erbium-doped fiber amplifier.

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Regarding Claim 97, it is inherent that said Raman amplifier and said rare-earth amplifier amplify and spectrally broadens said first and second beams, respectively.

Regarding Claim 98, it is known in the art that the wavelength is dependent upon the material used and the pumping energy.

Regarding Claim 99, '393 teaches in Claim 91 a splitter, a Raman amplifier, a rare-earth doped optical amplifier, and combining means. It is inherent that there is an input and output fiber since this is a fiber amplifier apparatus.

Regarding Claim 100, '393 teaches in Claim 91 that said splitter directs a first beam to the Raman amplifier and a second beam to the rare-earth doped optical amplifier.

Regarding Claim 101, '393 teaches in Claim 91 a splitter, a Raman amplifier, a rare-earth doped optical amplifier, and combining means. It is inherent that there is an input and output fiber since this is a fiber amplifier apparatus. It is also inherent that since the splitter creates two beams with different wavelengths that one amplifier will have a zero dispersion wavelength greater than the other.

Regarding Claim 102, '393 teaches in Claim 91 a splitter, a first amplifier, a second amplifier, and combining means. It is inherent that there is an input and output fiber since this is a fiber amplifier apparatus. It is also inherent that since the splitter creates two beams with different wavelengths that one amplifier will have a pump wavelength greater than the other.

Regarding Claim 103, '393 teaches in Claim 91 a splitter, a distributed gain medium, a rare-earth doped optical amplifier, and combining means. It is inherent that there is an input and output fiber since this is a fiber amplifier apparatus.

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Regarding Claim 104, '393 teaches in Claim 91 that said splitter directs a first beam to the Raman amplifier and a second beam to the rare-earth doped optical amplifier.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 703-306-5803. The examiner can normally be reached on Mon-Fri 10:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

*Davienne Monbleau*

DNM  
June 30, 2002

*Paul Ip*

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